

# marvel<sup>®</sup> Tech

## MGSI-03P3-100~136K



### Efficient Higher Revenue

- 9-12 MPP Trackers, high single circuit tracking accuracy, fast dynamic response and higher power generation
- 150% DC Input Oversizing
- Maximum efficiency of 98.7%. Wide MPPT voltage range: 180V-1000V
- Compatible with high power modules



### Intelligent Simple O&M

- Smart I-V Curve Diagnosis Function: locate PV string faults accurately and automatically detect faults
- Intelligent Fault Detection: AC side voltage and current waveforms real-time recorded, fast fault location
- Support RS485 (WiFi/DRM/Bluetooth optional): remote monitoring and operation via PC or mobile phones



### Reliable Worry Free

- IP66 Protection degree: support outdoor installation
- DC & AC Type II SPD: prevent lightning damage
- AFCI Function (Optional): when an arc-fault is detected the inverter immediately stops operation



# Technical Data

	MGSI-100K-03P3	MGSI-110K-03P3	MGSI-136K-03P3
<b>Input (DC)</b>			
Max. Input Power	150kW		160kW
Max. Input Voltage	1100V		
Start Voltage	250V		
Rated Input Voltage	620V		730V
Full-load MPP Voltage Range	530V ~ 850V		560V ~ 850V
MPPT Voltage Range	180V ~ 1000V		
Number of MPP Trackers	9	10	12
Number of string per MPPT	2		
Max. Current per MPPT	30A		
Max. Short Circuit Current per MPPT	40A		
<b>Output (AC)</b>			
Max. Output Current	158.8A	174.6A	
Rated Output Power	100kW	110kW	136kW
Max. Output Power	110kVA	121kVA	150kVA
Rated Grid Frequency	50Hz / 60Hz		
Rated Grid Voltage	230Vac / 400Vac, 3L / N / PE, 3L / PE	277Vac / 480Vac, 3L / N / PE, 3L / PE	311Vac / 540Vac, 3L / N / PE, 3L / PE
Power Factor	>0.99 ( 0.8 leading ~ 0.8 lagging )		
THDi	<3% ( Rated Power )		
<b>Efficiency</b>			
Max. Efficiency	98.70%		
European Efficiency	98.50%		
MPPT Efficiency	99.90%		
<b>Protection</b>			
DC reverse polarity protection	Yes		
Anti-islanding protection	Yes		
AC short circuit protection	Yes		
Residual current monitoring unit	Yes		
Insulation resistance monitoring	Yes		
Ground fault monitoring	Yes		
Grid monitoring	Yes		
PV string monitoring	Yes		
Surge protection	Type II		
AFCI protection	Yes		
<b>Communication</b>			
Display	LCD / LED+APP		
Communication	Standard : RS485 WiFi / DRM / Bluetooth / Ethernet		
<b>Standard Compliance</b>			
Certification	IEC/EN 62109-1/2, IEC/EN 61000-6-1/3, IEC/EN 61000-6-2/4, EN50549, IEC61727/IEC62116, CEI 0-21/CEI 0-16, C10/C11, VDE 4105, VDE 0124, G99, RD244, UNE217001, UNE217002, NC RfG, TOR Erzeuger, NRS097-2-1, NB/T 32004		
<b>General Data</b>			
Dimensions (W x H x D)	1050 x 660 x 330 mm		
Weight	95kg	98kg	101kg
Operating Temperature Range	-30° C ~ +60° C		
Cooling Method	Smart forced air cooling		
Protection Degree	IP66		
Max. Operating Altitude	4000m		
Relative Humidity	0 ~ 100%		
Topology	Transformerless		
Night Power Consumption	<1W		